DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019719 Address: 333 Burma Road **Date Inspected:** 30-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Oiu Wen. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG components.

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA Inspector observed and/or found the following:

Bay 14:

This QA Inspector observed the following work in progress:

OBG Seg 13AW:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3013B-224 [Floor Beam (FB) to Edge Beam (EB) 3047A, complete joint penetration (CJP) weld, at PP120]. The welder is identified as 066361 and was observed welding in the 4G position. ZPMC Quality Control (QC) was identified as Zhang Ling. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-TC-U4b-FCM-1.

The SMAW process on weld joint no: SEG3013AH-028 (FB3191A to K-plate, CJP weld, at PP119+1500). The welder is identified as 069841 and was observed welding in the 3G position. ZPMC QC was identified as Zhang Lin. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-TC-U4b-FCM-1.

The SMAW process on weld joint no: SEG3013AH-025 (FB to K-plate, CJP weld, at PP119). The welder is

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

identified as 037748 and was observed welding in the 3G position. ZPMC QC was identified as Zhang Lin. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-TC-U4b-FCM-1.

Repair welding of weld joint no: SEG3013H-003 [FB3187A to Bottom Panel (BP) SA3168A, CJP weld at PP119]. The welder is identified as 066163 and was observed welding in the 2G position. Welding process was identified as SMAW. ZPMC QC was identified as Liu Feng. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 19199 Rev-0.

The SMAW process on weld joint no: SEG3013R-028 (FB3172A to K-plate 3010A, CJP weld, at PP117.5). The welder is identified as 067183 and was observed welding in the 3G position. ZPMC QC was identified as Liu Feng. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-TC-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3013F-065 (I-rib to I-rib stiffeners at FB3191A at PP119+1500, CJP weld). The welder is identified as 068494 and was observed welding in the 3G position. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

Repair welding of weld joint no: SEG3013G-002 (FB3193A to BP, CJP weld at PP119+1500). The welder is identified as 045240 and was observed welding in the 2G position. Welding process was identified as FCAW. ZPMC QC was identified as Liu Feng. The welding variables recorded by this QC appeared to comply with WPS: 345-FCAW-2G(2F)-FCM-Repair-ESAB. Repair welding was done as per WRR: B-WR 19590 Rev-0.

OBG Seg 14W:

The SMAW process on weld joint nos: SEG3020T-305 and 309 (FB3349A to LD3048A, fillet weld, at PP125.5). The welder is identified as 045246 and was observed welding in the 3F position. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2114.

The FCAW process on weld joint no: SEG3020D-052 (FB3343A to BP3091A, CJP weld, at PP128.3). The welders are identified as 202122, 047866 and 066239 and were observed welding in the 2G position. ZPMC QC was identified as Zhu Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The SMAW process on weld joint no: SEG3020L-170 (LD3049B-I-rib on FB3327A at PP127, CJP weld). The welder is identified as 066038 and was observed welding in the 1G position. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-TC-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020M-200 (LD3048A-I-rib on FB3328A at PP127, CJP weld). The welder is identified as 045246 and was observed welding in the 1G position. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-TC-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar, Sailesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer